

The HAI Hub

A Quarterly Publication by the Patient Safety Program & Healthcare-Associated Infections (HAI) Epidemiology Team

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Colorado Department
of Public Health
and Environment

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Spotlight: IP Champion Christina Ewers RN, MSN, CIC

1. When you are not fighting infections or promoting hand washing in hospitals, what do you enjoy doing most?

Colorado is so beautiful! I really enjoy taking advantage of this gorgeous state. Most weekends include a hike and visit to all the craft breweries here.

2. What words of wisdom would you pass on to the infection prevention community?

Establishing and maintaining relationships with departments and staff throughout the hospital may be both time-consuming and challenging, but it is vital to functioning as an Infection Preventionist (IP). Developing relationships has enabled me to identify allies, subject matter experts, and hopefully let staff see Infection Prevention less like an enemy and more like a partner in providing patient care.

3. During your time in the world of infection control, what was your most rewarding experience?

Any time staff stops you in the hallway to ask questions, it proves they are engaged and thinking about patient care. The Medical Center of Aurora and Centennial Medical Plaza have some very engaged and caring staff. I feel very fortunate to work here.

4. What do you wish senior leadership knew about infection control?

Our field is faced with growing and evolving demands (e.g., CMS validations) and emerging pathogens like *extended-spectrum β-lactamases* (ESBLs). Access to education and technology resources mutually benefits IPs, the hospital, and patients.

5. What is your favorite and/or least favorite pathogen and why?

Clostridium difficile is probably my favorite because its emergence is so multi-dimensional (i.e., environmental transmission, antibiotics, proton pump inhibitors, and recent links to retail meat sales and community-acquired cases) and therefore challenging. Mold is my least favorite because of the difficulty with colonization versus infection and community acquisition versus construction-related. Our facility is undergoing construction like many other hospitals and one has to constantly be on guard performing risk assessments.

6. What else would you like us to know about your journey in the field of infection prevention?

I would like to thank my colleagues who have supported me on this journey of being a newbie. Mentoring can be super-duper time-consuming, but I appreciate those who do it. It makes our field that much stronger.



Christina Ewers is the Infection Prevention Supervisor at the Medical Center of Aurora. Christina is originally from Cincinnati, and the majority of her family still resides there. Christina lives in the Wash Park area of Denver. Her hobbies are hiking, sports, traveling and reading.

"Christina helped identify deficiencies and collaborated with the Intervention Radiology (IR) Department to educate staff and adjust the department's insertion techniques surrounding PICC lines. From just this one intervention, Christina and IR were able to decrease CLABSI rates in 2011."

Do you know an IP Champion? Please nominate that individual for the fall edition of The HAI Hub. Send the nominee's name, place of employment, a brief explanation of the qualities this IP embodies and why he/she should be your next IP Champion to Juan Suazo at: Juan.Suazo@dphe.state.co.us.

CDC Position Statement: Protect Patients Against Preventable Harm from Improper Use of Single-dose/Single-use Vials

The Centers for Disease Control and Prevention (CDC) released a position statement in May restating its injection safety guidelines and calling for medications labeled by the manufacturer as "single dose" or "single use" to be used for *only one patient*. This statement was created in response to ongoing questions and misinformation about CDC's [injection safety guidance](#) (part of the 2007 Guideline for Isolation Precautions).

A [document](#) recently circulated by the American Society of Interventional Pain Physicians (ASIPP) misrepresents the CDC position and may be confusing to clinicians. This document suggests that restricting single-dose/single-use vials to one patient contributes to drug shortages and increases medical costs. CDC is aware of at least 19 outbreaks caused by unsafe injection practices where single-dose or single-use medications were used for more than one patient.

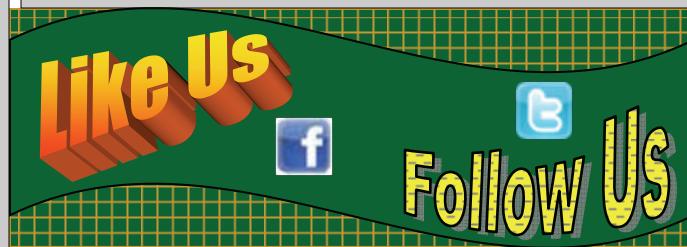
The Colorado Department of Public Health & Environment endorses CDC's position statement, since safe injection practices, including restricting single-dose/single-use vials to one patient, are a priority in protecting patients from this preventable harm.

To access the CDC Position Statement visit: <http://www.cdc.gov/injectionsafety/CDCposition-SingleUseVial.html>

Group A Strep in Long Term Care

Frequently asked questions and guidelines for infection control measures for invasive group A *Streptococcus* (GAS) infections in patients residing in long-term care facilities (LTCF) are available at: <http://www.cdphe.state.co.us/hf/protocols/GAS.pdf>.

A [single case](#) of invasive GAS disease in a facility can indicate unrecognized GAS transmission among staff members and residents and should be investigated as per the guidelines above. The Communicable Disease Epidemiology Program conducts surveillance of invasive GAS disease (positive culture from a normally sterile site) in the five-county Denver metropolitan area and provides guidance to facilities that are found to have invasive GAS cases. These guidelines are applicable to LTCFs statewide, and program consultation is available as needed. Please contact the Communicable Disease Epidemiology Program at 303-692-2700 with questions.



Multistate Outbreak of Postprocedural Fungal Endophthalmitis Associated with a Single Compounding Pharmacy

On March 5, 2012, the California Department of Public Health was notified of nine cases of clinically diagnosed fungal endophthalmitis at a single California ambulatory surgical center. Initially it was determined that all case patients had undergone invasive eye procedures using a dye called Brilliant Blue-G (BBG) from Franck's Compounding Pharmacy. As more cases were detected nationally, the investigation was expanded to include intravitreal injection of triamcinolone-containing products, also from Franck's. On March 9, 2012, Franck's voluntarily recalled all BBG dye lots, and on March 31, 2012 single lots of triamcinolone products were also voluntary recalled. To date there are 33 cases in seven states with 13 case patients associated with the triamcinolone exposure and 20 case patients associated with the BBG exposure.

On March 23, 2012, the Colorado Department of Public Health and Environment was notified of a fungal endophthalmitis infection in a Colorado resident following an invasive eye procedure where BBG was used. This case was identified via an U.S. Food and Drug Administration (FDA) MedWatch Report, completed by the patient's physician. Despite extensive case finding efforts, only one case was identified in Colorado.

Although patient follow-up is still ongoing, to date 23 (77 percent) of 30 case patients suffered some degree of vision loss, ranging from partial to severe, and 24 (80 percent) of 30 case patients required repeat ophthalmic surgeries due to their infections. Identified by culture or genetic sequencing, the mold *Fusarium incarnatum-equiseti* species complex was found to be associated with patients in the BBG cluster, and *Bipolaris hawaiiensis* was found in patients in the triamcinolone cluster.

Following an investigation and environmental sampling completed by the FDA on May 25, 2012, Franck's Compounding Pharmacy voluntarily recalled all human and veterinary sterile preparations compounded since November 21, 2011. Physicians have been notified of the recalled products and instructed to avoid using them. It is recommended that physicians review their patient medical records to determine if any adverse events may have resulted from the use of recalled products. If found, adverse events should be reported to Franck's Compounding Pharmacy and the FDA's MedWatch program.

To find out more about the recall please see <http://www.francks.com/> or <http://www.fda.gov/Safety/Recalls/ucm305509.htm>

INFECTION PREVENTION QUIZ

1) Medication vials are entered with a new needle and a new syringe with the expectation that the same needle/syringe can be used for obtaining additional doses for the same patient.

- ◆ True
- ◆ False

GO!

<p>2) This type of study compares disease incidence over time between groups that differ by their exposure to a factor of interest. You follow the participants to assess the development of the outcome of interest.</p> <ul style="list-style-type: none"> ◆ Case-control ◆ Cohort study 	<p>3) A propagated outbreak is one where there is a continual source of exposure, whereas a _____ outbreak is one with a single source of infection.</p>
<p>10) Needles are used for only one patient, but syringes can be reused on more than one patient since they do not come into contact with the patient's body fluids (e.g., blood).</p> <ul style="list-style-type: none"> ◆ True ◆ False 	
<p>9) This graph used in outbreaks is a type of histogram that displays the number of cases over the date of onset, and is useful in determining a point-source vs. a propagated outbreak. Answer: _____</p>	
<p>8) Hand hygiene is necessary before putting on gloves prior to performing invasive procedures and after removing gloves for which of the following reasons (choose the best answer):</p> <ul style="list-style-type: none"> ◆ Glove materials may contain imperfections invisible to the naked eye. ◆ The warm environment within gloves can promote growth of germs already present on skin. ◆ Hands may become contaminated when gloves are removed. ◆ Gloves are not 100% effective in preventing contamination of patients. ◆ A healthcare worker may forget to wash after eating their lunch. ◆ All of the above. 	<p>4) Alcohol-based handrubs are most effective at killing germs when the concentration of alcohol is:</p> <ul style="list-style-type: none"> ◆ >50 percent ◆ >55 percent ◆ >60 percent ◆ Only 100 percent will effectively kill germs <p>5) Vegetative bacteria (<i>Staphylococcus aureus</i>, <i>Pseudomonas aeruginosa</i>) can be effectively eradicated by low level disinfection and sterilization.</p> <ul style="list-style-type: none"> ◆ True ◆ False

7) Since 1974 the CDC has noted higher rates of healthcare-acquired *Acinetobacter* infections during which season?

- ◆ Winter
- ◆ Spring
- ◆ Summer
- ◆ Fall

6) The most common species of carbapenem-resistant *Enterobacteriaceae* found in the U.S. today is:

- ◆ *Serratia marcescens*
- ◆ *Staphylococcus aureus*
- ◆ *Escherichia coli*
- ◆ *Klebsiella pneumoniae*

The first person to correctly submit quiz answers will receive a pre-purchased microbe from giantmicrobes.com!!!!

Please scan or fax submissions to Juan Suazo @ juan.suazo@dphe.state.co.us; 303-753-6214

Communicable Disease Epidemiology Program DCEED-EPI-A3
4300 Cherry Creek Drive South Denver, Colorado 80246 (303) 692-2700
http://www.cdphe.state.co.us/dc/Epidemiology/dc_guide.html

Patient Safety Program HFEMSD-A2
4300 Cherry Creek Drive South Denver, Colorado 80246 (303) 692-2800
<http://www.cdphe.state.co.us/hf/patientsafety/index.html>

Regional Infection Training Course Update

The Patient Safety Program is sponsoring a FREE two-day infection control training for Infection Preventionists.

Remaining Schedule

- ◆ Steamboat Springs: 7/12-13
- ◆ Gunnison: 7/16-17
- ◆ Pueblo: 7/26-27 (FULL)
- ◆ Durango: 7/30-31

To register please contact Juan Suazo at 303-692-2869 or Juan.Suazo@dphe.state.co.us

Program Updates

- ◆ Sara Reese has left the Patient Safety Program. Sara is now an infection preventionist at Denver Health and Hospital Authority.
- ◆ The Patient Safety Program has hired a new employee, Rosine Angbanzan. Rosine was hired as a Health Professional III and will be assisting with collaborative and validation projects.
- ◆ The Patient Safety Program will begin two new validation study projects, one focusing on hip and knee surgical site infections, and the other focusing on dialysis related infections.